



1600 South Second Street
Mount Vernon, WA 98273-5202
ph 360.428.1617
fax 360.428.1620
www.nwcleanair.org

Air Operating Permit Excess Emissions Report Form Part II

Name of Facility	Shell, Puget Sound Refinery	Reported by	Tim Figgie
Date of notification	March 21, 2012	Incident type: breakdown/ upset/startup or shutdown	Shutdown
Start Date	March 21, 2012	Start Time:	6:00 AM
End Date	March 21, 2012	End Time:	7:00 AM
Process unit or system(s): Cogen #3			

Incident Description

On March 21, 2012 at approximately 6:00 AM the Cogen #3 was shutdown to repair a failed thermocouple. During the shutdown an actuator pin failed on the inlet guide vane positioner which required repair before the thermocouple could be repaired. Once the actuator pin was repaired the unit was restarted to clear the permissive alarms so that the thermocouple repair could be completed. High CO occurred during the unit startup. These emissions are a normal part of startup. This event resulted in a 1-hour average CO reading above the 22-ppm average limit.

Immediate steps taken to limit the duration and/or quantity of excess emissions:

These emissions are a normal part of startup.

Applicable air operating permit term(s): 5.29

Estimated Excess Emissions: Based on CEMS and calculated stack flow	Pollutant(s): CO	Pounds (Estimate): 0.1
--	---------------------	---------------------------

The incident was the result of the following (check all that apply):

- ☐ Scheduled equipment startup
- ☒ Scheduled equipment shutdown
- ☐ Poor or inadequate design
- ☐ Careless, poor, or inadequate operation
- ☐ Poor or inadequate maintenance
- ☐ A reasonably preventable condition

Did the facility receive any complaints from the public?

- ☒ No
- ☐ Yes (provide details below)

Did the incident result in the violation of an ambient air quality standard

- ☒ No
- ☐ Yes (provide details below)

Root and other contributing causes of incident:

These emissions are a normal part of startup.

The root cause of the incident was:

PSR0000584

Air Operating Permit
Excess Emissions Report Form Part II
Page 2

(The retention of records of all required monitoring data and support information shall be kept for a period of five years from the date of the report as per the WAC regulation (173-401-615))

- ☐ Identified for the first time
☒ Identified as a recurrence (explain previous incident(s) below – provide dates)

Other startups have occurred.

Are the emissions from the incident exempted by the NSPS or NESHAP "malfunction" definitions below?

- ☐ No
☒ Yes (describe below)

These emissions are a normal part of startup and are unavoidable.

Definition of NSPS "Malfunction": Any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or failure of a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. 40 CFR 60.2

Definition of NESHAP "Malfunction": Any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. 40 CFR 63.2

Analyses of measures available to reduce likelihood of recurrence (evaluate possible design, operational, and maintenance changes; discuss alternatives, probable effectiveness, and cost; determine if an outside consultant should be retained to assist with analyses):

These emissions are a normal part of startup and are unavoidable.

Description of corrective action to be taken (include commencement and completion dates):

See above

If correction not required, explain basis for conclusion:

See above

Attach Reports, Reference Documents, and Other Backup Material as Necessary. This report satisfies the requirements of both NWCAA regulation 340, 341, 342 and the WAC regulation (173-400-107).

Is the investigation continuing? ☒ No ☐ Yes

Is the source requesting additional time for completion of the report? ☒ No ☐ Yes

Based upon information and belief formed after reasonable inquiry, I certify that the statements and information in this document and all referenced documents and attachments are true, accurate and complete.

Prepared By: _ Tim Figgie_ Date: _ March 21, 2012_

Responsible Official or Designee: 

Date: 4/26/12